REMARKS

Applicant respectfully requests reconsideration of this application. Claims 1-5, 7-15, 17-25, and 27-30 are pending. Claims 1, 5, 7-9, 11, 15, 17-19, and 21 have been amended. No claims have been cancelled. Claims 31-33 have been added.

Therefore, claims 1-5, 7-15, 17-25, and 27-33 are now presented for examination.

Claim Amendments

In the prior amendment, the term "profile data" was changed to "trace" in certain claims. The Applicant has determined that the original language was appropriate, and the claims have been amended accordingly.

Claim Rejections under 35 U.S.C. §102

Levine

The Examiner rejected claims 1-4, 7, 10-14, 17, 20-22, 24, 25 and 27 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,134,710 of Levine et al. (hereinafter referred to as *Levine*).

Independent claim 1 of the present application, as amended herein, includes the following elements:

1. A method comprising:

    ...

    establishing parameters regarding the monitoring of the microarchitecture events by setting one or more monitor control vectors, the one or more monitor control vectors to monitor events in a detection exception stage of an execution pipeline;

storing profile data that is captured by the one or more hardware
monitors in a first level profile buffer, the first level profile
buffer being a architecturally non-visible memory, the
storing of the traces being performed in a write-back stage
of the execution pipeline;

...

The claim thus includes the monitoring of events by the monitor control vectors in a detection state of an execution pipeline. The claim further includes the storing of the traces in a first level profile buffer, with the storing of the traces being performed in a write-back stage of the execution pipeline. As provided, the profiles can be written back using the execution pipeline capabilities.

It is submitted that *Levine* does not include the referenced elements of the claims. *Levine* indicates that the patent relates to "to optimizing the performance of a superscalar pipelined digital processor, or an equivalent thereof, capable of executing multiple instructions in a single instruction cycle." (*Levine*, col. 6, lines 3-6) However, *Levine* contains no teaching regarding the storing of captured data with regard to the instruction pipeline. In *Levine*, the process of storing data is indicated simply as a method of storing to a register, with the data being copied to main memory for servicing. "When the interrupt 570 is signaled, the effective address of the instruction being executed is saved in the sampled instruction address register (SIAR) 530 and the effective address of its operand is saved in the sampled data address register (SDAR) 540. When the interrupt is serviced by the interrupt handling routine 580, the profiling program, step 430 of FIG. 6, copies the contents of the SIAR 530 and the SDAR 540 into tables in main memory." (*Levine*, col. 10, line 63 to col. 11, line 3)

It is further noted that dependent claim 31 has been added, as well as related claims 32 and 33. Pursuant to claim 31, the captured profile data is treated as an operand of an instruction for writing back to the first level profile buffer. It is submitted that *Levine* contains no teaching or suggestion regarding treating of captured data as an instruction operand.

Similar modifications have been made to claims 11 and 21. It is submitted that the above arguments are also applicable to claims 11 and 21, and that claims 11 and 21 are thus also allowable. Claims 2-4, 7, 10, 12-14, 17, 20, 22, 24, 25 and 27 are dependent claims and, among other reasons, are allowable as being dependent on independent claims 1, 11, and 21.

Claim Rejections under 35 U.S.C. §103

Levine

Claims 5, 15 and 23 were rejected under 35 U.S.C. §103 (a) as being unpatentable over *Levine* as applied to claims 2, 12 and 22 respectively.

Levine is discussed above. Claims 5, 15, and 23 are dependent claims and, among other reasons for allowance, are allowable as being dependent on independent claims 1, 11, and 21.

Claim Rejections under 35 U.S.C. §103

Levine in view of Krishnaswamy

Claims 8, 9, 18, 19 and 28-30 were rejected under 35 U.S.C. §103 (a) as being unpatentable over *Levine* in view of U.S. Patent No. 6,622,300 of Krishnaswamy et al. (hereinafter referred to as "*Krishnaswamy*").

Claims 8, 9, 18, 19 and 28-30 are dependent claims and, in addition to other reasons for allowance, are allowable as being dependent on the allowable base claims.

In addition, it is submitted that *Krishnaswamy* does not teach or suggest the elements of the claims that are missing from *Levine*, and thus the references, separately or in combination, cannot teach or suggest the elements of the claims

Conclusion

Applicant respectfully submits that the rejections have been overcome by the amendment and remark, and that the claims as amended are now in condition for allowance. Accordingly, Applicant respectfully requests the rejections be withdrawn and the claims as amended be allowed.
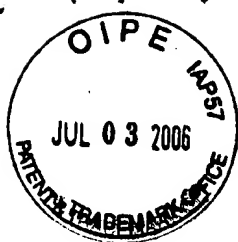
Invitation for a Telephone Interview

The Examiner is requested to call the undersigned at (503) 439-8778 if there remains any issue with allowance of the case.

Request for an Extension of Time

The Applicant respectfully petitions for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be required. Please charge our Deposit Account No. 02-2666 to cover any additional fee under 37 C.F.R. § 1.17 for such an extension.
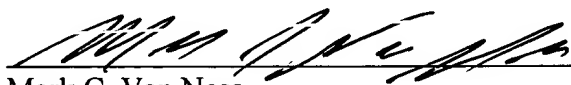
Charge our Deposit Account

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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